

13/108 A/Reissoc



INSULATED REMOVABLE POND COVER

5V SUMMARY AND BACKGROUND OF THE INVENTION

Man-made, usually rectangular, settling ponds are used for holding sewage and industrial wastes. These ponds are usually covered by a large one-piece geomembrane which has gas and water collection systems and is usually not insulated. These pond covers are laid on-site and secured by an anchoring trench. Because of their size, they are difficult to remove.

The present invention is an insulated removable pond cover which is made in sections which are held together by means of a series of grommets and cables. The cables are secured to a series of concrete deadheads.

The primary advantage of the invention is that it is removable, thus allowing the pond to be dredged and re-used. Another advantage is that the insulation results in heat being retained in the pond, thus speeding biodegradation of organic material.

DR DESCRIPTION OF THE DRAWINGS

FIG. 1 is a side view of two of the panels.

FIG. 2 is a top perspective view showing two full panels and parts of four other panels, starting from one edge of the pond cover on the left.

DE DESCRIPTION OF THE INVENTION

The pond cover comprises a plurality of generally rectangular casings or panel units 1 linked together. The number and size of the casings 1 will vary depending

upon the size of the pond to be covered, and the casings 1 are arranged in as many rows as are needed. Generally each casing 1 will be about seven and one-half feet wide and approximately forty feet long. Each casing 1 is filled with a layer of insulation 3 and then sealed at either end and along either side by a fusion weld 4. The casings 1 are made of a geomembrane (a high density polyethylene material).

Adjacent casings 1 are linked together in overlapping spaced relationship by means of a grommet and cable system. Each casing 1 is provided with a plurality of grommets 5 at either end and along either side, positioned outside the welded area 4 so as to not break the seal. The total number of grommets 5 per casing 1 can vary. After the grommets 5 of adjacent casings 1 are lined up in vertical spaced relationship to each other, a cable 7 is passed through the openings of the grommets 5, is formed into a loop above the panels 1 and is secured in position by a cable clamp 11 attached to the cable 7 beneath the casings 1. A heavy tie-down cable 12 is then passed through all the loops of the cables 7 in the row and is secured at either end to an anchor post such as a concrete deadhead, in a conventional manner such as tying the cable 12 to a rod with a nut at either end and securing the cable 12 with a cable clamp. If wind gets underneath the cover it is a problem, additional cables can be passed through the cable loops 7 perpendicular to cable 12 at either end and in the middle of the series of casings 1.

Once the pond cover has been secured in position, it will float upon the liquid in the pond, and it can be removed when the pond needs to be dredged.